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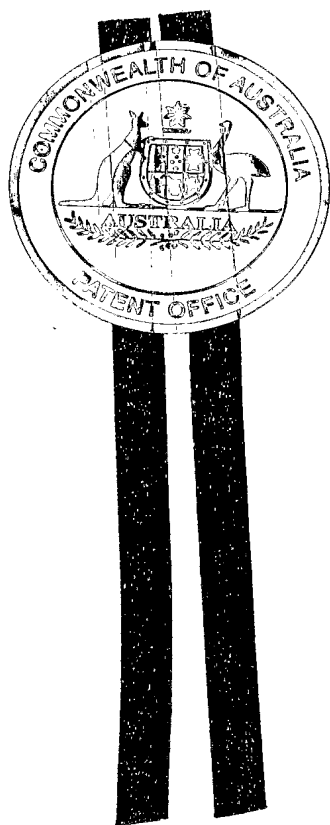


PCT/AU2005/000212

Australian Government

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Canberra

I, JANENE PEISKER, TEAM LEADER EXAMINATION SUPPORT AND SALES hereby certify that annexed is a true copy of the Provisional specification in connection with Application No. 2004900831 for a patent by BRUCE WILLIAM ROSS as filed on 18 February 2004.



WITNESS my hand this  
First day of April 2005

A handwritten signature in cursive script, appearing to read 'J. Peisker'.

JANENE PEISKER  
TEAM LEADER EXAMINATION  
SUPPORT AND SALES

P00009  
Regulation 3.2

AUSTRALIA

Patents Act 1990

**PROVISIONAL SPECIFICATION FOR THE INVENTION ENTITLED:**

**PHYSICAL TRAINING APPARATUS**

This invention is described in the following statement:-

This invention relates to physical training machines and apparatus and more particularly to apparatus for developing and testing the strength and technique of athletes.

For the sake of convenience, the invention will be described in relation to the use of the apparatus in developing the strength and technique of forward players in the sport of rugby union football but it is to be understood that the invention is not limited thereto as it will find application in other sports and activities.

There is a need for a physical training machine which provides measured resistance in a horizontal plane to simulate effectively the body position and dynamic forces encountered in a rugby scrum.

According to one aspect of the invention there is provided a physical training apparatus comprising a main frame having a base which has a front portion and a back portion, an upright portion intermediate the front portion and back portion of the base, a moveable sled slidable with respect to the front portion of the main frame, cable means connected by one of its ends to the sled and extending from the front portion of the base and over the upright portion, a weight connected to the other end of the cable means and positioned above the base of the main frame rearward of the upper portion, the arrangement being such that forward pressure on the sled causes the weight to rise thereby providing resistance to the forward pressure on the sled.

In order that the invention may be more readily understood and put into practical effect, reference will now be made to the accompanying drawings in which:-

Fig. 1. is a side elevational view of a physical training device according to one aspect of the invention, and

Fig. 2 is a front view of the device shown in Fig. 1.

The physical training device 10 shown in the drawings consists of a main frame 11, moveable sled 12, weight 13 and cable means 14 connected between the sled 12 and the weight 13. The main frame 11 has a front portion 15, and a back portion 16 which collectively constitute the base of the main frame, and an upright portion 17.

The upright portion 17 consists of spaced apart pairs of front upright posts 18 and rear inclined posts 19 connected together at their tops by a cross bar 20 which supports a first pair of spaced apart pulleys 21. The rear post 19 acts as a runner for the axle or bar 22 of the weight 13. At each end of the axle or bar 22 there is a stub axle 23 for carrying weights 24 which may be varied in number as desired.

The base 25 of the main frame, which includes the front portion 15 and the back portion 16 may consist of two inwardly facing C-shaped channel members 26 and 27 connected together at the intermediate portion of the base by cross bars 28.

The sled 12 consists of a framework 30 which includes base side members 31, uprights 32 and braces 33. The uprights 32 each carry a pad 34. At the front and rear of the sled 12 there is a pair of front and rear wheels 35, 36 mounted on base cross-bars 37, 38 connecting the ends of base side members 31. The wheels 35, 36 run in the channel members 26 and 27 as can be seen in Fig. 2.

At the bottom of the posts 18 there is a second pair of pulleys 40 and at the front of the channel members 26 and 27 there is a third pair of pulleys 41. The cable means 14 consists of a pair of cables 42 and 43 which extend from the weight axle 22 over the first pulleys 21, around the second pulleys 40, the third pulleys 41 and are connected to the front of the sled 12 by connectors 44.

When an athlete pushes against the pads 34, the sled moves forward in the direction of arrow A in Fig. 1 with the cable means then raising the weight 13 to provide resistance to the pushing by the athlete. Preferably, the athlete crouches and assumes a position with his back horizontal before pushing  
5 against the pads 34. The cables and pulleys convert the vertical resistance of the weight 13 into horizontal resistance against pushing of the sled.

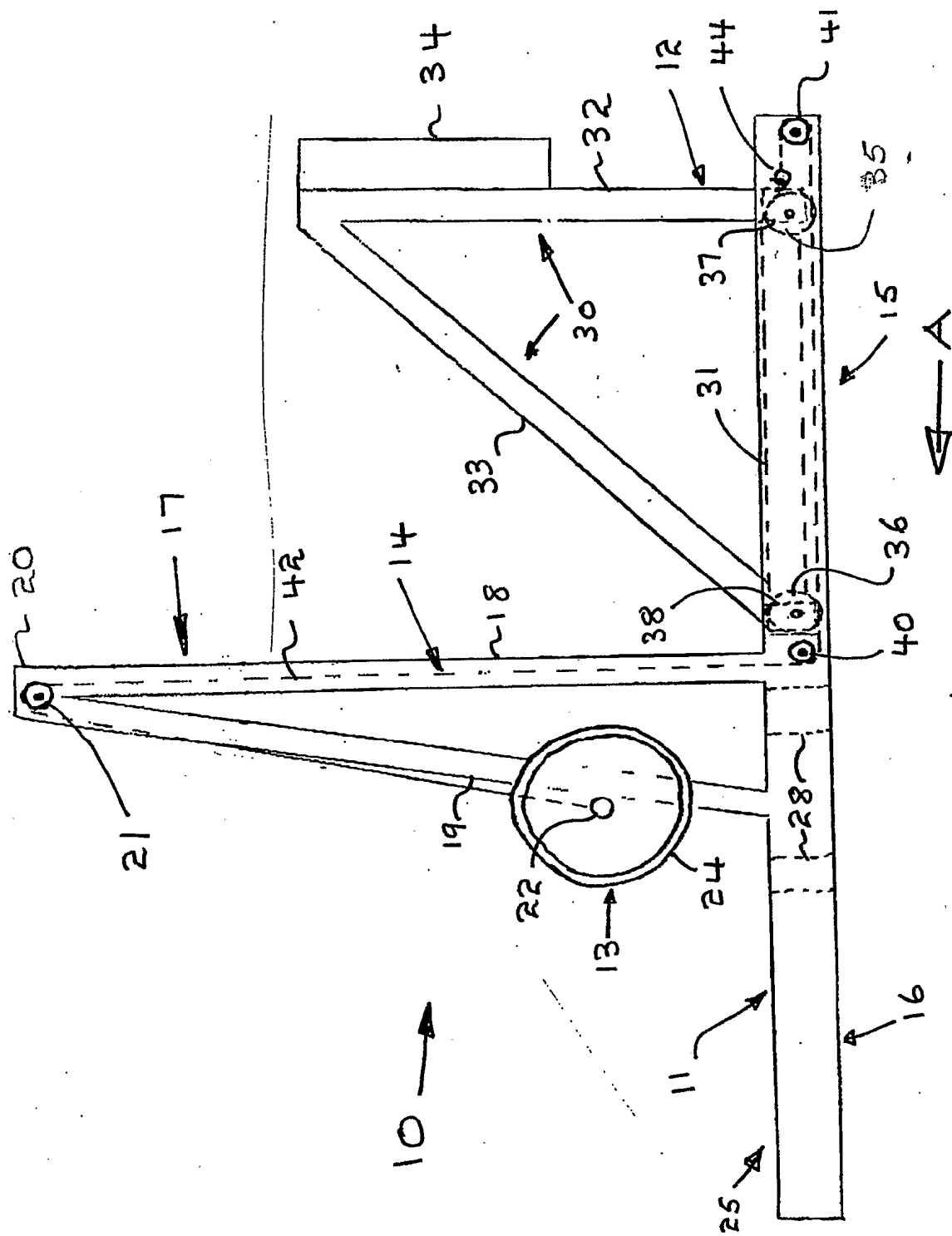
Various modifications may be made in details of design and construction without departing from the scope and ambit of the invention.

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Dated this 18 day of February 2004

**Bruce William Ross**

15 Patent Attorneys for the Applicant  
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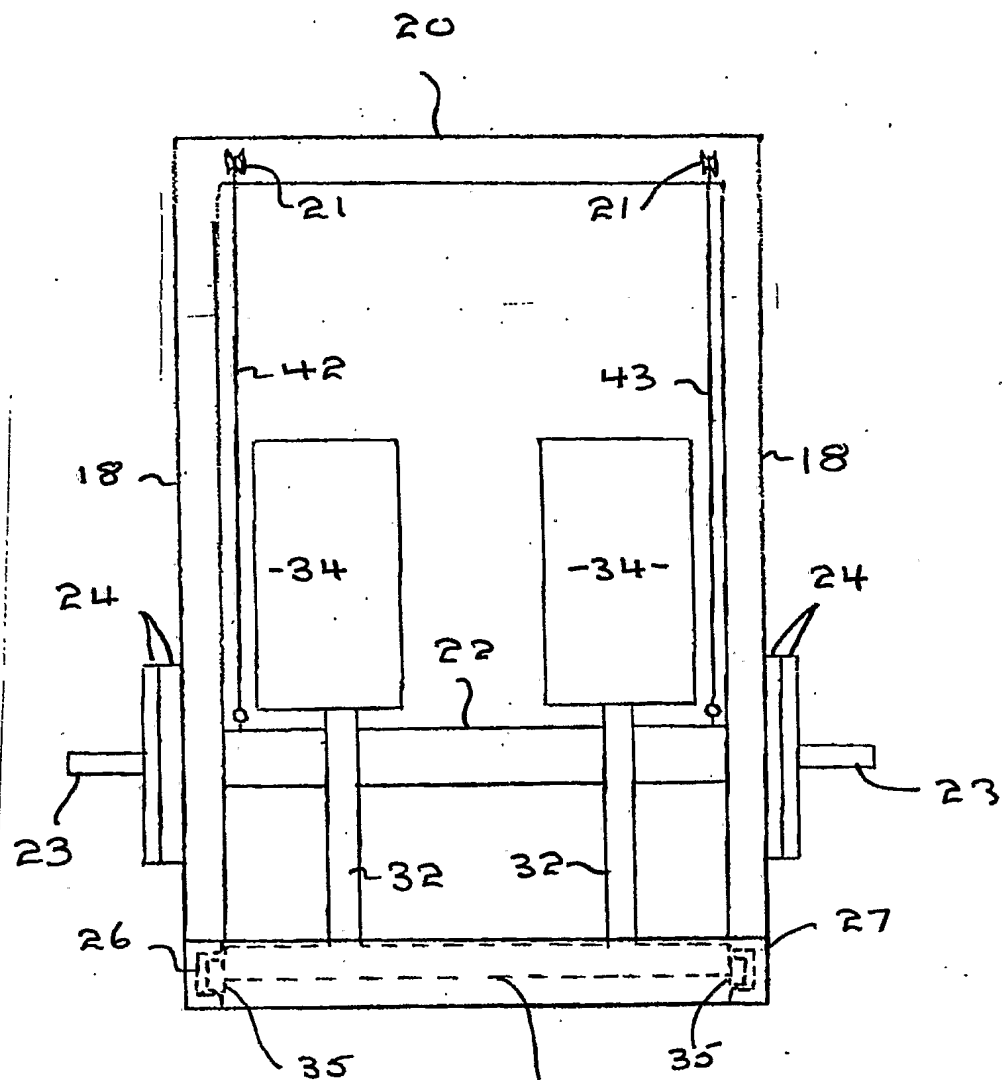


Fig. 2